

CLAIMS

1. A platen plate arranged at a position opposing a liquid ejection surface on the bottom surface of a liquid ejection head so as to support an ejection object for liquid droplets ejected from each nozzle of the liquid ejection surface, the platen plate comprising a plurality of ribs raised from its bottom surface so as to extend in a conveying direction of the ejection object and arranged at predetermined intervals in a width wise direction of the ejection object,

wherein out of a region where liquid droplets ejected from the each nozzle are landed, the bottom surface of the ejection object is supported with top faces of the ribs so as to define a distance between the ejection object and the liquid ejection surface, and

wherein within the region where liquid droplets ejected from the each nozzle are landed, the rib top faces are formed to have a height, or the ribs themselves do not exist, so that the rib top faces are not brought into contact with the bottom surface of the ejection object.

2. The platen plate according to Claim 1, wherein the ribs are provided with inclined surfaces or curved surfaces formed at an upstream end in a conveying direction of the ejection object for introducing the leading end of the

ejection object, which is conveyed from an upstream, to the rib top faces.

3. The platen plate according to Claim 1, wherein in rows 5 adjacent to each other of the plurality of ribs, the rib top faces positioned on an upstream side, or a downstream side, of a conveying direction of the ejection object are displaced from the other rib top faces.

10 4. The platen plate according to Claim 1, wherein within the region where liquid droplets ejected from the each nozzle are landed, a liquid absorbing material is provided for absorbing the liquid droplets.

15 5. The platen plate according to Claim 1, wherein the ribs are formed so as to continuously extend in a width wise direction of the ejection object.

6. A liquid ejection apparatus comprising a platen plate 20 arranged at a position opposing a liquid ejection surface on the bottom surface of a liquid ejection head, in the liquid ejection apparatus, an ejection object is supported with the platen plate while being conveyed so as to eject liquid droplets on the ejection object from each nozzle of the 25 liquid ejection surface,

wherein the platen plate includes a plurality of ribs raised from its bottom surface so as to extend in a conveying direction of the ejection object and arranged at predetermined intervals in a width wise direction of the
5 ejection object, and out of a region where liquid droplets ejected from the each nozzle are landed, the bottom surface of the ejection object is supported with top faces of the ribs so as to define a distance between the ejection object and the liquid ejection surface, and within the region where
10 liquid droplets ejected from the each nozzle are landed, the rib top faces are formed to have a height, or the ribs themselves do not exist, so that the rib top faces are not brought into contact with the bottom surface of the ejection object.

15

7. The apparatus according to Claim 6, wherein the ribs are provided with inclined surfaces or curved surfaces formed at an upstream end in a conveying direction of the ejection object for introducing the leading end of the
20 ejection object, which is conveyed from an upstream, to the rib top faces.

8. The apparatus according to Claim 6, wherein in rows adjacent to each other of the plurality of ribs, the rib top
25 faces positioned on an upstream side, or a downstream side,

of a conveying direction of the ejection object are displaced from the other rib top faces.

9. The apparatus according to Claim 6, wherein within the
5 region where liquid droplets ejected from the each nozzle are landed, a liquid absorbing material is provided for absorbing the liquid droplets.

10. The apparatus according to Claim 6, wherein the ribs
10 are formed so as to continuously extend in a width wise direction of the ejection object.

11. The apparatus according to Claim 6, further comprising conveying means having a conveying belt arranged
15 along a predetermined route for conveying the ejection object from a supply side to the liquid ejection head of the ejection object to a discharge side thereof,

wherein within a region where predetermined liquid is ejected from the liquid ejection head, the conveying belt of
20 the conveying means is located in the rear of the platen plate relative to the liquid ejection head.

12. The apparatus according to Claim 11, further comprising route changing means arranged at a position where
25 the conveying belt is located in the rear of the platen

- 42 -

S04P0894

plate for changing the route of the conveying belt.